

Environmental Protection Agency

§ 76.13

§ 76.5 where it is demonstrated, to the satisfaction of the Administrator, that:

(i) The unit is located at a source with two or more other units, all of which are Phase I units that are subject to section 404(d) of the Act and have tangentially fired boilers;

(ii) The NO_x control system at the unit was scheduled to be installed by January 1, 1997 and, because of operational problems associated with the NO_x control system, will be redesigned; and

(iii) Installation of the redesigned low NO_x burner technology at the unit cannot be completed by January 1, 1997 without causing system reliability problems.

(2) A complete petition shall include the following elements and shall be submitted by April 28, 1995.

(i) Identification of the unit and the other units at the source;

(ii) A statement describing how the requirements of paragraphs (e)(1)(ii) and (e)(1)(iii) of this section are met;

(iii) The earliest date, not later than December 31, 1997, by which installation of the redesigned low NO_x burner technology can be completed consistent with system reliability; and

(iv) The provisions in paragraph (e)(4) of this section.

(3) To the extent the Administrator determines that a Phase I unit meets the requirements of paragraphs (e)(1) and (e)(2) of this section, the Administrator will approve the petition within 90 days from receipt of the complete petition. The Acid Rain permit governing the unit will be revised in order to incorporate the approved extension, which shall terminate no later than December 31, 1997, by administrative amendment under § 72.83 of this chapter except that the Administrator will have 90 days to take final action.

(4) The unit shall comply with the applicable emission limitation under § 76.5 beginning on the day immediately following the day on which the extension approved under paragraph (e)(3) of this section terminates. Compliance shall be determined as specified in part 75 of this chapter using measured values of NO_x emissions and heat input only for the portion of the year that the emission limit is in effect. If a unit with an approved extension is included

in an averaging plan under § 76.11 for year 1997, the unit shall be treated, for the purpose of applying Equation 1 in § 76.11(a)(6) and Equation 2 in § 76.11(d)(1)(ii)(A), as subject to the applicable emission limitation under § 76.5 for the entire year 1997.

§ 76.13 Compliance and excess emissions.

Excess emissions of nitrogen oxides under § 77.6 of this chapter shall be calculated as follows:

(a) For a unit that is not in an approved averaging plan:

(1) Calculate EE_i for each portion of the calendar year that the unit is subject to a different NO_x emission limitation:

$$EE_i = \frac{(R_{ai} - R_{li}) \times HI_i}{2000} \quad (\text{Equation 3})$$

Where:

EE_i = Excess emissions for NO_x for the portion of the calendar year (in tons);

R_{ai} = Actual average emission rate for the unit (in lb/mmBtu), determined according to part 75 of this chapter for the portion of the calendar year for which the applicable emission limitation R_i is in effect;

R_{li} = Applicable emission limitation for the unit, (in lb/mmBtu), as specified in § 76.5, 76.6, or 76.7 or as determined under § 76.10;

$$EE = \sum_{i=1}^n EE_i \quad (\text{Equation 4})$$

HI_i = Actual heat input for the unit, (in mmBtu), determined according to part 75 of this chapter for the portion of the calendar year for which the applicable emission limitation, R_i, is in effect.

(2) If EE_i is a negative number for any portion of the calendar year, the EE value for that portion of the calendar year shall be equal to zero (e.g., if EE_i = -100, then EE_i = 0).

(3) Sum all EE_i values for the calendar year:

Where:

EE = Excess emissions for NO_x for the year (in tons);

n = The number of time periods during which a unit is subject to different emission limitations; and

(b) For units participating in an approved averaging plan, when all the requirements under § 76.11(d)(1) are not met,

$$EE = \frac{\sum_{i=1}^n (R_{ai} \times HI_i) - \sum_{i=1}^n (R_{li} \times HI_i)}{2000} \quad (\text{Equation 5})$$

Where:

EE = Excess emissions for NO_x for the year (in tons);

R_{ai} = Actual annual average emission rate for NO_x for unit i, (in lb/mmBtu), determined according to part 75 of this chapter;

R_{li} = Applicable emission limitation for unit i, (in lb/mmBtu), as specified in § 76.5, 76.6, or 76.7;

HI_i = Actual annual heat input for unit i, mmBtu, determined according to part 75 of this chapter;

n = Number of units in the averaging plan.

§ 76.14 Monitoring, recordkeeping, and reporting.

(a) A petition for an alternative emission limitation demonstration period under § 76.10(d) shall include the following information:

(1) In accordance with § 76.10(d)(4), the following information:

(i) Documentation that the owner or operator solicited bids for a NO_x emission control system designed for application to the specific boiler and designed to achieve the applicable emission limitation in § 76.5, 76.6, or 76.7 on an annual average basis. This documentation must include a copy of all bid specifications.

(ii) A copy of the performance guarantee submitted by the vendor of the installed NO_x emission control system to the owner or operator showing that such system was designed to meet the applicable emission limitation in § 76.5, 76.6, or 76.7 on an annual average basis.

(iii) Documentation describing the operational and combustion conditions that are the basis of the performance guarantee.

(iv) Certification by the primary vendor of the NO_x emission control system that such equipment and associated auxiliary equipment was properly installed according to the modifications and procedures specified by the vendor.

(v) Certification by the designated representative that the owner(s) or operator installed technology that meets the requirements of § 76.10(a)(2).

(2) In accordance with § 76.10(d)(9), the following information:

(i) The operating conditions of the NO_x emission control system including load range, O₂ range, coal volatile matter range, and, for tangentially fired boilers, distribution of combustion air within the NO_x emission control system;

(ii) Certification by the designated representative that the owner(s) or operator have achieved and are following the operating conditions, boiler modifications, and upgrades that formed the basis for the system design and performance guarantee;

(iii) Any planned equipment modifications and upgrades for the purpose of achieving the maximum NO_x reduction performance of the NO_x emission control system that were not included in the design specifications and performance guarantee, but that were achieved prior to submission of this application and are being followed;

(iv) A list of any modifications or replacements of equipment that are to be done prior to the completion of the demonstration period for the purpose of reducing emissions of NO_x; and

(v) The parametric testing that will be conducted to determine the reason or reasons for the failure of the unit to achieve the applicable emission limitation and to verify the proper operation of the installed NO_x emission control